making phase and/or magnitude adjustments to the signals conveyed on that branch). Device **10**B may include one or more antennas such as antennas **40**B that exchange wireless power signals and/or wireless communications signals with antenna(s) **40**A via wireless path **106**. Each of antennas **40**B may be coupled to a respective branch **102**B of wireless circuitry between wireless circuit **104**B and that antenna **40**B. Each circuit branch **102**A may include a respective one of adjustable circuits **100**A (e.g., adjustable circuitry for making phase and/or magnitude adjustments to the signals conveyed on that branch).

[0020] By making phase and/or magnitude adjustments using adjustable circuitry such as the circuitry of circuits **100**A and **100**B, the antenna arrays of devices **10**A and/or **10**B may be used to perform beam steering operations associated with the transmission and/or reception of wireless signals. Beam steering operations may, for example, be performed dynamically to ensure that wireless power transfer operations or wireless communications operations are performed effectively over path **106**, even as devices **10**A and **10**B are moved relative to each other and the surrounding environment.

[0021] During wireless power transfer operations, wireless power transfer circuitry in circuit **104**A in device **10**A and circuit **104**B in device **10**B may be used to transfer power between devices. A first device such as device **10**A may use circuit **104**A, circuits **100**A, and antennas **40**A to transfer power wirelessly over path **106**. A second device such as device **10**B may use antennas **40**B, circuits **100**B, and circuit **104**B to receive the transmitted wireless power. During wireless communications (e.g., communications at extremely high frequencies or other suitable frequencies), device **10**A may transmit wireless signals to device **10**B over path **106**. Device **10**A may, for example, use circuit **104**A, adjustable circuits **100**A, and antennas **40**A to transmit wireless communications signals that are received by device **10**B using antennas **40**B, adjustable circuits **100**B, and circuit **104**B.

[0022] A schematic diagram of illustrative circuitry of the type that may be used in devices such as devices **10**A and **10**B is shown in FIG. **2**. As shown in FIG. **2**, circuitry **10** may include control circuitry such as storage and processing circuitry **30**. Storage and processing circuitry **30** may include storage such as hard disk drive storage, nonvolatile memory (e.g., flash memory or other electrically-programmable-read-only memory configured to form a solid state drive), volatile memory (e.g., static or dynamic random-access-memory), etc. Processing circuitry in storage and processing circuitry **30** may be used to control the operation of circuitry **10**. This processing circuitry may be based on one or more microprocessors, microcontrollers, digital signal processors, baseband processor integrated circuits, application specific integrated circuits, etc.

[0023] Storage and processing circuitry **30** may be used to run software on devices **10**A and/or **10**B such as internet browsing applications, voice-over-internet-protocol (VOIP) telephone call applications, email applications, media playback applications, operating system functions, functions related to supporting wireless charging operations, etc. To support interactions with external equipment, storage and processing circuitry **30** may be used in implementing communications protocols. Communications protocols that may be implemented using storage and processing circuitry **30** include internet protocols, wireless local area network protocols (e.g., IEEE 802.11 protocols—sometimes referred to as WiFi® and WiGig), protocols for other short-range wireless communications links such as the Bluetooth® protocol, cellular telephone protocols, MIMO protocols, antenna diversity protocols, satellite navigation system protocols, etc.

[0024] Circuitry **10** may include input-output circuitry **44**. Input-output circuitry **44** may include input-output devices **32**. Input-output devices **32** may be used to allow data to be supplied to device **10**A and/or **10**B and to allow data to be provided from device **10**A and/or **10**B to external devices. Input-output devices **32** may include user interface devices, data port devices, and other input-output components. For example, input-output devices may include touch screens (i.e., displays with touch sensors), displays without touch sensor capabilities, buttons, joysticks, scrolling wheels, touch pads, key pads, keyboards, microphones, cameras, speakers, status indicators, light sources, audio jacks and other audio port components, digital data port devices, light sensors, accelerometers or other components that can detect motion and device orientation relative to the Earth, capacitance sensors, proximity sensors (e.g., a capacitive proximity sensor and/or an infrared proximity sensor), magnetic sensors, a connector port sensor or other sensor that determines whether a device is mounted in a dock, and other sensors and input-output components.

[0025] Input-output circuitry **44** may include wireless circuitry **34**. Wireless circuitry **34** may include wireless circuitry **104** (sometimes referred to as transmitter circuitry, receiver circuitry, transceiver circuitry, etc.) for supporting wireless charging (e.g., using wireless power circuitry **91**) and/or wireless communications (e.g., using wireless communications circuitry **90**). Circuitry **104** may perform the functions of circuitry **104**A, **104**B, **100**A, and **100**B of FIG. **1**. Wireless circuitry **104** may be formed from one or more integrated circuits, may include power amplifier circuitry, low-noise input amplifiers, passive RF components, and/or other circuitry. Circuitry **104** may transmit and/or receive wireless signals over path **106** using one or more antennas **40** (see, e.g., antennas **40**A and **40**B of FIG. **1**).

[0026] Wireless communications circuitry **90** may include wireless local area network transceiver circuitry that may handle 2.4 GHz and 5 GHz bands for WiFi® (IEEE 802.11) communications and that may handle the 2.4 GHz Bluetooth® communications band. Circuitry **90** may also include cellular telephone transceiver circuitry for handling wireless communications in frequency ranges such as a low communications band from 700 to 960 MHz, a midband from 1710 to 2170 MHz, and a high band from 2300 to 2700 MHz or other communications bands between 700 MHz and 2700 MHz or other suitable frequencies (as examples). Circuitry **90** may handle voice data and non-voice data. Circuitry **90** may include millimeter wave transceiver circuitry that may support communications at extremely high frequencies (e.g., millimeter wave frequencies from 10 GHz to 400 GHz or other millimeter wave frequencies). Circuitry **90** may handle IEEE 802.11 ad (WiGig) communications at 60 GHz (millimeter wave frequencies). If desired, circuitry **90** may include satellite navigation system circuitry such as Global Positioning System (GPS) receiver circuitry for receiving GPS signals at 1575 MHz or for handling other satellite positioning data (e.g., GLONASS signals at 1609 MHz). Satellite navigation system signals may be received from a constellation of satellites orbiting the earth.